

MISSOURI GEOGRAPHIC REFERENCE SYSTEM

MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF GEOLOGY AND LAND SURVEY

LAND SURVEY PROGRAM

PO Box 250, Rolla, Missouri 65402, (573) 368-2300

STATION NAME: GR-05

PID: AC7144

COUNTY: Greene

STATE: Missouri

TOWNSHIP: 28 NORTH, RANGE: 22 WEST, SECTION: 23

USGS 7.5' QUAD: Nixa

DATE MONUMENTED: 1989

MONUMENTED BY: MODNR

TECHNICAL DATA TABLE:

(All data in meters 1 meter = 3.28083333 feet)

HORIZONTAL: NAD 1983

VERTICAL: NAVD 1988

DATE OF OBSERVATIONS: 1990

DATE OF OBSERVATIONS: 1996

DATE OF ADJUSTMENT: 2000

DATE OF ADJUSTMENT: 1996

ORDER: 1st

ORDER: 2nd

LATITUDE: 37°06'58.61116"

ELEVATION: 379.505

LONGITUDE: 93°18'19.67871"

ELLIPSOID HEIGHT: 350.44

MISSOURI COORDINATE SYSTEM 1983:

NORTH (Y): 142660.060

EAST (X): 428417.548

ZONE: Central

CONVERGENCE: -00°29'10"

GRID FACTOR: .9999415

AZIMUTH INFORMATION:

STATION: GR-05

AZIMUTH MARK: GR-05 A

GEODETIC:

ASTRONOMIC: 89°41'38"

GRID: 90°10'48"

REMARKS

The HORIZONTAL POSITION was determined by GPS observations and adjusted by the National Geodetic Survey in 2000

The AZIMUTH was determined by observation of Polaris with an estimated accuracy of 1 second of arc

The ELEVATION was determined by differential leveling and adjusted by the Missouri Department of Natural Resources in 1996

The ELLIPSOID HEIGHT was determined by GPS observations referenced to NAD83

GEOID 99 was used in determining ELEVATION and/or ELLIPSOID HEIGHT
Date of Report 2002

STATION: GR-05

DESCRIPTION: The station and azimuth marks are DNR aluminum GRS disks set in 12" diameter concrete posts flush with the ground surface.

STATION, AZIMUTH MARKS AND REFERENCE TIES: The station is located in the south right-of-way of west Plainview Road in Sec. 23, T28N, R22W, which is about 7 miles south of downtown Springfield. The station is 25.5 ft. south of the center line of west Plainview Road; 68.4 ft. east of the center line of south Stonegate Street; 43.75 ft. east of a 1/2" iron bar in a concrete gutter; 28.85 ft. northwest of southwest angle point of rock wall with Stonegate Subdivision sign; 56.2 ft. west of the northeast corner of the rock wall; and 2.0 ft. north of a carsonite witness post.

The azimuth mark is located about one-half mile east of the station in the north right-of-way of west Plainview Road 136.5 ft. west of the center line of the outer road on the west side of US Hwy 160. The mark is 12.23 ft. southwest of the southwest corner of a steel telephone base; 21.4 ft. north of the center line of west Plainview Road; 51.46 ft. northwest of a nail and bottle cap in the west side of a power pole; 5.75 ft. southeast of the southeast corner of the steel base of a lamp pole; and 2.0 ft. south of a carsonite witness post.

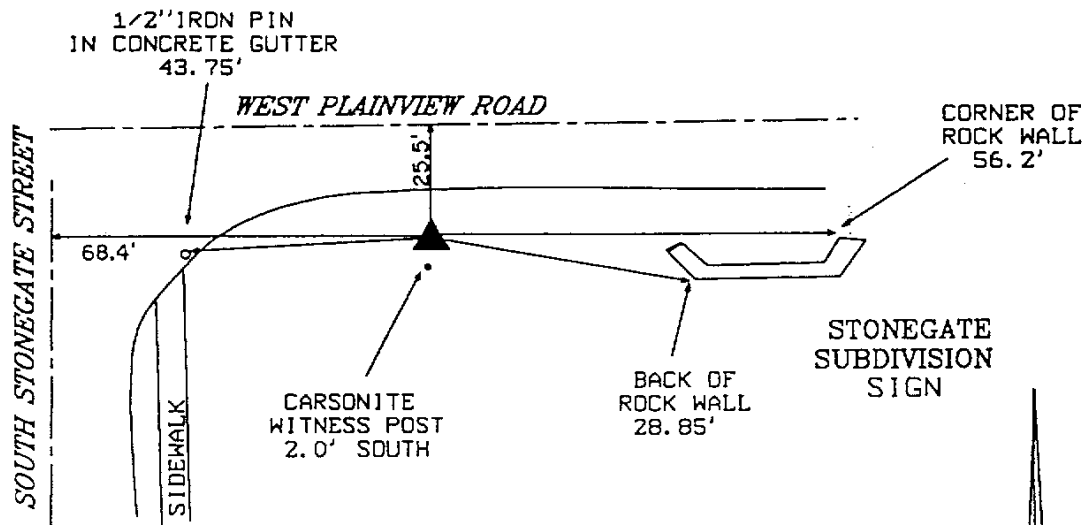
STATION & AZIMUTH MARK TO REACH: To reach the station from the intersection of Hwy M (James River Frwy.) and US 160 on the south side of Springfield go south on Route US 160 1.36 mile to the intersection of US 160 and Plainview Road. Turn right and go west on Plainview Road about 200 ft. to the azimuth mark on the right as described. Continue west on Plainview Road 0.47 mile to T-intersection with south Stonegate Street, turn left on Stonegate Street and the station on the left as described.

SPECIAL INFORMATION:

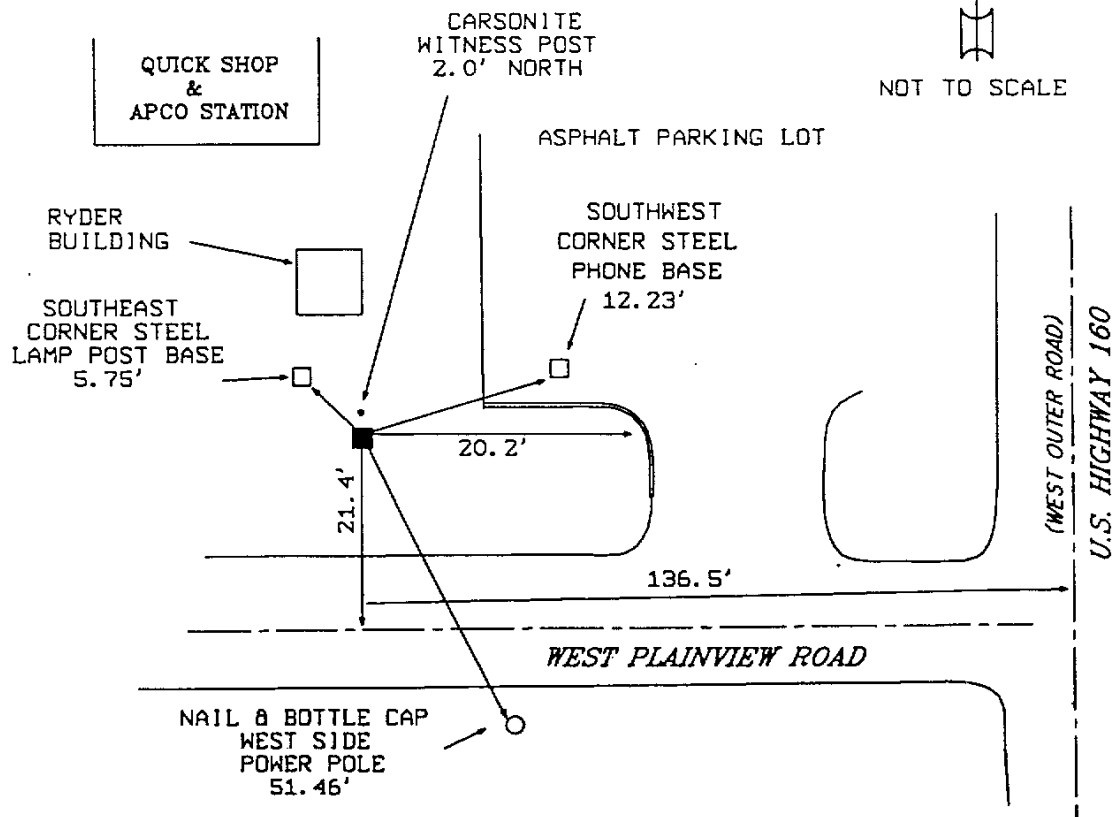
SUPERSEDED SURVEY CONTROL

NGS (1986)	LAT: 37°06'58.62392"	LONG: 93°18'19.67881Z"
MODNR (1994)	LAT: 37°06'58.62246"	LONG: 93°18'19.67754"
MODNR (1998)	LAT: 37°06'58.61132"	LONG: 93°18'19.67864"

Date of Report 2002



AZIMUTH MARK: GR-05A



NOT TO SCALE

DATE OF SKETCH 1990